APPENDIX H

ECONOMIC EFFECTS ANALYSIS

H-1. Requests for Analysis.

- a. Requirements for production of the economic effects analysis are covered in paragraph 3-53.
- b. Access to the Economic Impact Forecasting System (EIFS), a program within the Environmental Technical Information System(ETIS) at the USA Construction Engineering Research Laboratory (CERL) which produces the data on the effect of a CA study on the local community, may be obtained with a remote terminal and a toll-free telephone line, or by the FOA obtaining a login and password from CERL for access to ETIS, or by a mailin request.
- (1) Arrangements for access to the CERL computer by remote terminal are made by calling commercial (217) 333-1369.
- (2) Requests for a login and password should be addressed to:

USA-CERL US Army Corps of Engineers P. O. Box 4005 Champaign IL 61820

(3) Access is also obtained by mailing input data to CERL (see Figure H-1 for data requested).

H-2. <u>Input Data Elements</u>.

a. First county or region. This element refers to the military installation, FOA, or multi-county area surrounding the activity that will be affected by the conversion. CERL has defined the region for major Army installations so that all that has to be entered is the installation name if the activity is located near an Army installation. If the region has not been defined, the names of the counties and the state in which they are located with ten percent or more of the installation's/FOA's military and civilian workforce as residents should be entered. This can be accomplished through the use of the next data element if more than one county would be affected. When all affected regions have been entered, press <cr>, which means "carriage return."

- b. Next county or region (see paragraph H-2a for explanation of this element).
- c. EIFS v2.8 What profile? Enter "12" for Forecast Models.
- d. Forecast Models which functional area? Enter "1" for Commercial/Industrial Type Activities.
- e. The next data element concerns price deflators; the system will prompt you to choose between the default price deflators and those you enter yourself. Usually the default price deflator rather than your own should be used. Enter "d" to enter your own price deflators and <cr>
 to use the default price deflators (latest year). The system then prints the default price deflators for your information and then enters the COMMERCIAL/INDUSTRIAL TYPE ACTIVITIES (CITA) functional area for forecasting.
- f. Project name. Enter the location and name of the activity to be converted to contract, such as: "Alaska District, Word Processing." This data element is used only to identify the economic effects analysis during the processing cycle.
- g. Enter either "1" for "total expenditures" or "2" for "local expenditures." Since it is unlikely that residents in only one county would be affected, a "1" should be entered.
- h. Change in expenditures for services and supplies. Enter the entire annual dollar change, using a negative number for a decrease.
- i. Change in expenditures for local services and supplies. This is calculated by the system based on the total dollar change entered in paragraph 2-2h. It is the annual change in local procurement that will result from conversion to contract. If a "2" was entered for paragraph 2-2g, the FOA must enter this figure. In that case, include only procurements in the local area, not those from a central supply location. Include as decreases those purchases of supplies and services that will be absorbed in the contract. Do not include payments to the new contractor as increases in the local procurement.
- j. Estimated value of contract. Enter the annual contract amount including cost reimbursements and incentive fees. Do not include contract administration costs or cost of Government-furnished supplies and equipment.

- k. Change in civilian employment. The number of full-time civilian employees who will be released from Federal service or relocated out of the area due to conversion to contract. Include retirees and employees separated through exercise of "bumping rights" by directly affected employees. Do not include employees who will be placed in other Federal jobs at the FOA or in the commuting area.
- 1. Average income of affected civilian personnel. Enter the average income per year of the number of civilian employees used in k above. Do not include Government contributions to fringe benefits or the fringe benefit factor used in the in-house cost estimate.
- m. Change in military employment. Enter the number of military personnel currently assigned to the activity who will be reassigned due to conversion. Include those who will be reassigned locally and those who will be transferred from the FOA.
- n. Average income of affected military personnel. Enter the average income per year (pay and allowances) of the military personnel to be reassigned (m above).
- o. Percent of affected military living on base. Use the percentage of the military personnel to be reassigned (m above) that live on post (in barracks, family housing, or Government-furnished quarters at an FOA). This data element is required to distinguish those military personnel who do not spend as high a percentage for living expenses, such as housing, on the local economy.
- H-3. <u>Commercial/Industrial Forecast for Subject Activity</u>. Economic effects data is produced by the EIFS in the form of dollar values, workyears and percentage of change as an increase or decrease. Only the percent figures are used for the economic effects report to Congress. They provide an indication as to whether there really is an impact on the community from the contracting out of the subject activity. The following data elements are produced:
- a. Export employment multiplier. This is the total effect of each dollar expended on the local economy after all secondary and subsequent rounds have been felt. The multiplier is calculated by the EIFS based on economic theory and regional experience. A multiplier of 2.6 indicates that one dollar of injected economic activity creates a total effect of \$2.60.

- b. Export income multiplier. This element operates similarly to the export employment multiplier.
- c. Export sales multiplier. This element operates similarly to the export employment multiplier.
- d. Change in local sales volume, employment, income. These figures identify the total change expected in business volume or economic activity in the area upon conversion to contract.
- (1) Change in local sales volume includes the change in selected services, retail sales, wholesale trade, and manufacturing output. The "change in local sales volume (total)" is obtained by applying the "export employment multiplier" to the "change in local sales volume (direct)."
- (2) Change in local sales volume (direct) is the direct injection (or withdrawal) of funds as a result of conversion. For example, if conversion results in a reduction in local procurements, there will be a withdrawal of economic activity from the area and it can be expected that there would be a reduction in local sales volume. This is a direct change as a result of conversion and is a "first round" effect on the economy. It is felt in its entirety.
- (3) Change in local employment is the anticipated change in total local employment (full and part-time) from conversion to contract. The change is expressed in workyears. It does not indicate actual employed personnel.
- (4) Change in local income is an estimate of the change in total personal income that can be expected from the change in economic activity in the region.
 - e. Change in local consumption (housing and non-housing).
 - f. Change in local investment (housing and non-housing).
- g. Change in local population. This element represents the change in local population projected as a result of conversion. The EIFS estimates this change by applying an average dependency ratio to the net change in employment.
 - h. Change in number of school children.
 - i. Change in property values.

- j. Change in Government revenues--taxes and State and Federal aid to schools is the projected change in property value revenues and sales tax revenues in the area that will result from the economic effects of conversion.
 - k. Change in Government expenditures--schools and other.
 - 1. Net change in costs to local Government.

H-4. Comparison of Forecasted Values for the Studied Activity to Accepted Ranges of Values.

a. Once the output data elements have been produced with their associated values, the EIFS will prompt the user:

EIFS v2.8 - What profile?

The user should respond with the number "13" for Rational Threshold Values (rtv).

- b. The system will then produce the values by year for changes in business volume, personal income, employment, and population. Comparison of these outputs to the input data should proceed as follows:
- (1) The percentage for "change in local sales volume (total)" should fall between the positive and negative rtvs for BUSINESS VOLUME. If it does not, there is an economic impact on the community for this data element.
- (2) The percentage for "change in local income (place of residence)" should fall between the positive and negative rtvs for PERSONAL INCOME. If it does not, there is an economic impact on the community for this data element.
- (3) The percentage for "change in local employment (total)" should fall between the positive and negative rtvs for EMPLOYMENT. If it does not, there is an economic impact on the community for this data element.
- (4) The numbers for POPULATION change and the percentages of positive and negative rtvs for this output element are not analyzed for the economic effects analysis.
- c. If any of the output data elements which are compared to the rtvs falls outside the boundaries of both positive and negative rtvs, the FOA should prepare a synopsis indicating the value obtained for that data element

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and include a statement that there is an economic impact in that locality in the category of economic activity represented by that data element.

H-5. Completion Procedures for the Economic Effects Analysis.

- a. The user should enter "quit" to exit the EIFS and "quit" to exit the ETIS.
- b. The economic effects analysis will be included with the Final Decision Report and other required documents as set forth in paragraph 3-55.

(Letterhead Required)

(Date)

SUBJECT: Request for CA EIFS Economic Effects Analysis,

CA Study Number _____

Commander

USA Construction Engineering Research Laboratory

ATTN: ETIS

1003 West Nevada Street

Urbana, IL 61801

- 1. Requesting activity and mailing address.
- 2. Input data.
 - a. County or region.
 - b. Price deflators if default values not to be used.
 - c. Project name for studied activity.
 - d. Will local or total expenditures be entered?
 - e. Change in expenditures for services and supplies.
 - f. Estimated value of contract.
 - g. Change in civilian employment.
 - h. Average income of affected civilian personnnel.
 - i. Change in military employment
 - j. Average income of affected military personnel.
 - k. Percent of affected military living on base.
- 3. Date economic effects analysis is required.
- 4. Name and commercial telephone number of FOA point of contact for the analysis.

Figure H-1 Format for Mail Request for Economic Effects Analysis